

ABSTRACT OF THE DISCLOSURE

An uninterruptad power supply (UPS) device with  
uninterrupted neutral from input to output utilizes the same  
converter for converting rectified AC power and battery power  
5 to positive and negative high voltage (HV) rails. A simple  
circuit is utilized for connecting the battery to the  
conversion components of the PFC circuit without adverse  
affect on the performance of the PFC circuit, and while  
holding the battery substantially connected to neutral. In a  
10 first embodiment, the circuit comprises a simple combination  
of four diodes and a pair of high pass capacitors arranged so  
that in both power line and battery supply modes the battery  
is balanced around neutral. In a second, preferred  
embodiment, one terminal of the battery is connected directly  
15 to neutral.